2: Stefansson--82
116, 398, 322

(1908-12) 1914

Copper Eskimo

"During the summer the people who hunt south of the Dease, chop out with their adzes planks of green spruce and set them up to dry. At the freeze-up the camps concentrate around these places, and sleds are made for the return journey to the coast. Some sleds are well made, if the maker intends it for permanent use or to trade off to the Victoria Islanders; some are poorly made and intended to serve only for a few days or weeks till the cache is reached where they left their good sled in the spring."

2: Stefansson--82-83 (1908-1912) 1914 Copper Eskimo
116, 398, 322

"At these sledmaking places are made also, both for use and to trade, quantities of wooden furniture and utensils, dishes, pails, tables, lamp supports, bows, etc. The favorite sled-making place south of Coronation Gulf is on a branch of the Dease (not indicated on the ordinary maps) that heads near the northeast corner of McTavish [83] Bay, flows north, west, and then southwest into the Dease, joining that river about fifteen or eighteen miles above its mouth. The immediate locality is a clump of trees only a few acres in extent, located about fifteen miles up stream from the confluence of the Dease. This place is well-known to the Bear Lake Slaveys and is called by them 'Big Stick Island.' "

2: Stefansson--88 (1908-1912) 1914 Copper Eskimo
116, 322, 411

"The Kogluktogmiut and others who hunt towards Bear Lake make their bows exclusively of green spruce trees. These are chopped down with adzes and roughed-out in midsummer. After drying a month or so the bow materials are further shaped with the crooked knife and perhaps made into bows on the spot, perhaps carried unfinished to the coast in the fall."

2: Stefansson--103 (1908-12) 1914 Copper Eskimo
116, 322, 438

"There is also a specialization of industries by tribes according to the natural resources of the country. The Kogluktogmiut and others who hunt south to the woods of Great Bear Lake during the summer, make from spruce saplings large numbers of the type of tent poles necessary for the A-shaped skin tents that are in common use. They also make complete bows of wood, sinew, and antler all of which are more abundant among them than among most other of the mainland tribes. They also rough out the wooden materials for bows intended for sale to men who themselves are sufficiently supplied with sinew to be able to finish the work.

Commonly, those who hunt to Bear Lake abandon their sleds in the spring in the neighborhood of the seacoast and make new ones in the Bear Lake woods upon which to haul to the coast their household gear and the wooden wares they have made in summer. When they get to the coast with these new sleds they find there waiting for them the old sled of the year before and as no man has more than three dogs nor use for more than one sled, there is always one sled for sale.

Besides the articles already mentioned, the Bear Lake hunters during the summer make large numbers of snow shovels, wooden platters, planks intended for the floors of snowhouses, tables, and sideboards to be used in connection with the cooking over the seal oil lamp and the uprights and cross pieces needed for supporting the lamp on the table and for swinging the stone pots as well as supporting the drying frame upon which

the damp clothing is dried over the flame of the lamp, harpoon shafts, and spear shafts both for the caribou lance and the fishing spear as well as for the long gaffs that are chiefly used by the fishermen at Bloody Fall. All these are made in greater quantities than are needed by the makers and the Bear Lake hunters may therefore be considered merchants in wooden ware."

2: Stefansson--103-112 (1908-12) 1914 Copper Eskimo
116, 322, 438

"While the Bear Lake people make their implements and utensils out of green standing trees which they chop down at great labor with adzes, the Akuliakattagmiut also make various wooden articles for sale out of the driftwood which is more abundant on their beach than upon the shores of the rest of the Copper Eskimo district. While the Bear Lake men have to rough out each piece from green wood and leave it for months to dry before the wood is seasoned enough for finishing, the Akuliakattagmiut find the wood already seasoned to their hand. Neither do they have to carry the made articles long distances to the seacoast as do the Bear Lake traders. As a consequence, the Akuliakattagmiut are also great makers of sleds and bows and other wooden things with which they supply a considerable [112] portion of Victoria Island. Their sleds and their bows are considered to be about as good as those from Bear Lake although the bows intended for sale are seldom if ever completely finished for caribou sinew is scarce with the Akuliakattagmiut. In one thing only do the Bear Lake products excel according to popular estimation and that is that their tent poles being made of the slim saplings that grow in the thick woods are better than ones made on the sea shore by the splitting of large logs and adzing them down."

28: Jenness E-5 (1914-1916) 1946
NDB Copper Eskimo NDB

# CHAPTER I

## MATERIAL RESOURCES

Few people have been called upon to sustain life and perpetuate their race on such meagre resources as the Copper Eskimo. Even if they had been acquainted with agriculture the climate debarred it, just as it debarred the growth of trees except in two or three sheltered valleys along the southern fringe of their territory. It restricted not only the flora but the fauna, leaving the natives dependent for their food and for much of their equipment on one land animal, the seasonally migrating caribou, and two sea mammals, the foetid and the bearded seals, supplemented by such fish as they could capture in rivers, lakes, and bays. Ignorant of all metals except their native copper, which seemed to them only a malleable stone, and cut off from contact with any but neighbouring tribes, little or no more advanced than themselves, they had to build up their lives on the scanty resources provided by their own narrow environment, and rely on their own ingenuity to supply all their needs.

The resources provided by their environment fall naturally into four groups:

Wood
Stone (including native copper and other minerals)
Bone, antler, horn, ivory
Hides and sinew.

### WOOD

The Copper Eskimo obtained their wood from two sources. First, there was the driftwood, mainly spruce and cottonwood, carried to the ocean by Mackenzie River far to the westward and borne by the winds and currents to Dolphin and Union Strait and western bays of Victoria Island. Then in the valleys of three rivers that flowed into Coronation Gulf, Coppermine, Napaktauktauk, and Tree, there stood scattered groves of spruce, small and stunted, a few miles from the coast, but larger as one proceeded south. Far to the southeast, too, near Theron River, were other stands of spruce that the Eskimo from Bathurst Inlet and from the eastern shores of Victoria Island occasionally visited in their wanderings. Thus the Copper Eskimo had abundant wood to satisfy all their needs; but as driftwood was very scarce in many districts, and the standing timber on the southern fringe of their territory could be reached only after a long journey overland, which many natives were disinclined to make, manufactured objects of wood were among the commonest articles of trade and passed freely from one end of the territory to the other. Moreover, so crude were the Eskimo tools, and so great the labour of cutting down the trees and hewing the timber into shape, that any object of moderate size, such as a sled-runner, a table, or even a tent-pole, commanded a high price.[1]

The principal tools used in working wood were the adze and the whittling knife (See pp. 109 and 103). Bone or antler wedges, generally made for each occasion and immediately discarded, served to split small logs and planks; they were driven home with boulders. Lacking saws, the Eskimo shortened a plank in one or other of three ways: they hacked it with the adze; gouged it across with the grooving tool (See p. 100); or they drilled a line of holes across it with the bow drill.

[1] Cf. Robertson, T.: The Malerualik Eskimo. Arctic Expedition. Anth. Papers, Amer. Mus. of Nat. Hist., vol. XXV, pt. I, pp. 31, 32 and 37 et seq. New York, 1925.

412 Two incidents that came directly under my notice in the summer of 1915
322 were fairly typical. A native with whom I was travelling in southwest Victoria Island discovered on the beach a long, nail-studded plank that had presumably fallen overboard from some vessel. He carried it several miles inland to our camp, and there spent half a day splitting it into poles for fish-spear handles, two of which he sold to a kinsman. A few days later another native found a second plank, which he proposed to convert into a sled-runner, and with this purpose in view trimmed it slightly with his hunting knife. After consulting his companions, however, he decided that a new sled-runner was not needed, so he turned the [729] plank over to his stepfather to fashion into tent-poles. In each case the native split the plank with a crude antler wedge driven home by a boulder.

322 The uses of wood were naturally manifold. From it were made the sled,
302 the tent-poles, the frame of the kayak, the snow shovel, the table, food trays, and other articles too numerous to mention. Odd chips of wood sometimes served as fuel during the summer months, although the Eskimo preferred
824 heather or willow twigs. Willow twigs had a special use; sewn together in a
513 long strip they provided a mattress to protect the bedskins from the snow.

STONE

333 Stone (apart from native copper) played an astonishingly small rôle in the economy of the Copper Eskimo. Their winter home was invariably the snow-
[342] hut, although their predecessors in the region had dwelt in huts of snow or wood, whose ruins could still be traced in numerous places along the coast. Loose stone boulders held down the edges of the Copper Eskimo tents; pillars of stone (in many cases flat slabs of dolomite easily piled one on top of another) supported kayaks, sleds, and other goods that were temporarily abandoned during the summer months; and heaped-up boulders protected caches of meat or clothes from the ravages of foxes, wolves, and birds; but any real construc-
324 tion in stone was conspicuously lacking. There were no stone knives or adzes,
412 no arrow heads tipped with stone, no stone sinkers for fishing lines or nets, and no stone scrapers for use on wood or hides, although implements of all these types had been used by the earlier inhabitants and were sometimes gathered as curiosities by the Copper Eskimo themselves. There were stone hammers and whetstones, it is true, but these were merely unshaped pebbles picked up when
[415] the need arose and afterwards discarded. In short, stone provided the material
[354] for two objects only, the lamp and the cooking pot; and the stone cooking pot
[177] was discarded soon after our visit in favour of iron vessels brought in from the outside.

135

Figure 1. Lamp of native copper. IV.D.1441. 1/1.

324 These two vessels, the lamp and the cooking pot, were invariably made from
415 soapstone (talc chlorite schist), originally with copper-bladed adzes, but in our
354 time with adzes of iron. Freshly quarried soapstone readily scratches with the
516

[135]

bone, and seldom exceeded 4 inches in length. The teeth, which generally numbered from five to seven, were cut with the man's grooving tool, and a hole was nearly always drilled in the upper end for attaching the article to the needle-case. Most combs were simply cut off in a blunt point at the top, and though at times this shape was slightly modified, there was never any attempt at ornamental carving. Even the surface was rarely etched, and then only with two or three straight lines or with the ring-and-dot pattern. Typical specimens are shown in Figure 42.

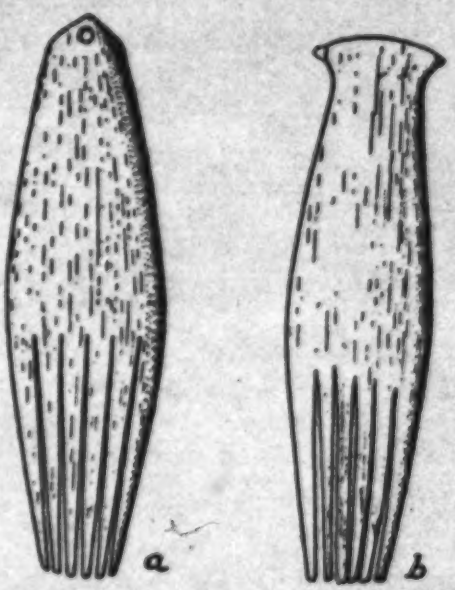


Figure 42. Women's combs. IV.D.1892, 884. 1/1.

Snow goggles (Figure 43), made of wood or antler, had the shape usual among all Eskimos. Projecting brow-pieces to intercept light from above were not uncommon. The cord was of sinew or sealskin. The slits were of even width, rarely widened at the inner end as in many goggles from Hudson Bay. Ornamentation was absent.[1]

*Tattooing.* The appearance of the women was greatly affected by tattooing. Only two men were seen with tattoo marks, which in both cases consisted of two short lines across the bridge of the nose. The marks on one man, a native from Coppermine River, had no significance that I could discover. He stated himself that they were due to an arbitrary whim, but I strongly suspect that

[1] See Plate VI in Report of the Canadian Arctic Expedition, vol. XII, pt. B, p. 70B.

67

No other Eskimo group seems to have used
354 lamps of this type unless derived by them in trade from the Copper Eskimo, for
437 their convenient shape and large size caused them to command an extensive
439 market. Not only were they bartered from group to group throughout the Coronation Gulf area, but they were traded along the coast to the Netchilik Eskimo of King William Island, and westward beyond the natives of Mackenzie delta to Barrow.[1]

435 Their value naturally increased according to their distance from the source
354 of supply. Thus, on the west coast of Victoria Island, when the small 12-inch
322 lamp (Figure 55) fell and shattered its back rim, its owner, or more probably
237 her husband, did not discard it, as she would probably have done in Coronation
356 Gulf, but made an entirely new back piece of wood, which she lashed through three holes with cords of sealskin or plaited sinew.[2] The larger lamps, of course, were mended everywhere, sometimes with another piece of soapstone, more usually with wood, which was cemented with seal blood and secured with lashings.

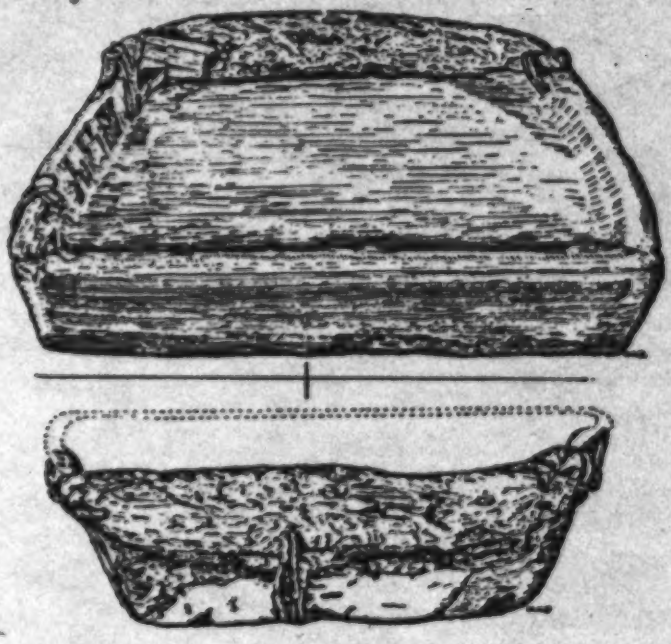

Figure 55. Lamp repaired with wood. IV.D.1[illegible]. Approx. 1/2.

354 The National Museum of Canada possesses two very shallow ellipsoidal lamps, obtained in Prince Albert Sound, that have no partitions, are rounded on the bottoms, inside and outside, and must be tilted forward to permit the oil to flow to the wick. One (Figure 56), 15¼ inches long by 8½ inches wide, has been

[113]

[1] Cf. Simpson, John: The Western Eskimo; Arctic Papers for the Expedition of 1[illegible], London, 1[illegible], p. [illegible].
[2] The specimen is too heavily encrusted with blubber to determine the exact material of the lashings.

wood) (Figure 65) to large dippers 25 cm. long and 21 cm. wide at the outer rim. Another common type was long and narrow, almost rectangular, like the specimen shown in Figure 66; and between this type and the former there were gradations of every kind. Most specimens were slightly flattened on the bottom to prevent them from tipping over.

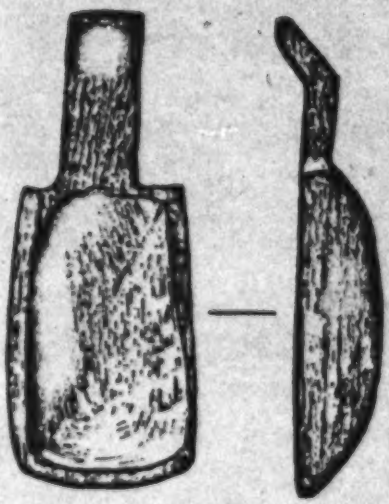

Figure 65. Toy wooden ladle. IV.D.129a. 1/1.

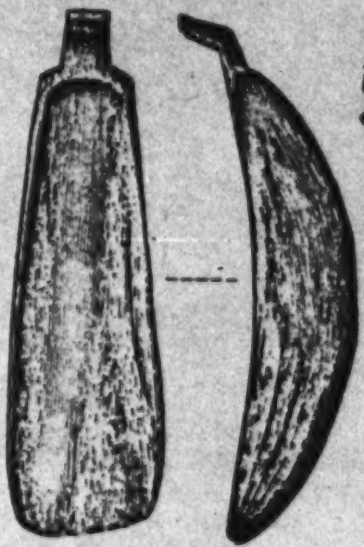

Figure 66. Narrow ladle, of musk-ox horn. IV.D.165. 1/2.

Much less common than either of these two types was the drinking horn, where the small end was either cut off and plugged with bone or wood (Figure 67), or else curved back to provide a handle (Figure 68).

Figure 67. Drinking horn, of musk-ox horn. IV.D.1628. 2/3.

Nearly all ladles had the short handles slightly upturned. Often it was found easier to make this part separate, and to attach it to a short extension of the bowl with pegs of copper, bone, horn, or antler (Figure 69). Cracks and holes in the bowl, and broken edges, were patched in a similar manner (Figure 70).

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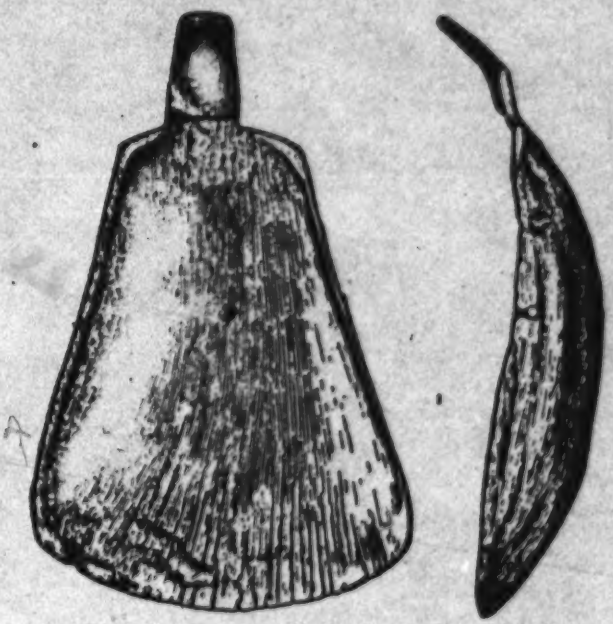

Figure 70. Repaired ladle. IV.D.666. 1/2.

WOODEN DISHES

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The wooden dishes for holding meat and blubber ranged in size from 5 or 6 inches to almost 2 feet. Some were round, with hollowed, saucer-like bottoms; they were made by curving a thin slat of spruce wood into a circle, joining the two ends with bone or copper rivets, and mortising in the bottom (Figure 71). Other dishes, made in exactly the same way, were oval instead of round (Figure 73). Besides these two forms there were oblong dishes with sloping sides, made by hollowing out a solid block of wood with the adze and the knife (Figure 73). I saw no baleen dishes such as are common in other parts of the Arctic.

[412]

[321]

Figure 71. Round dish, made from two pieces of wood. IV.D.617. 1/2.

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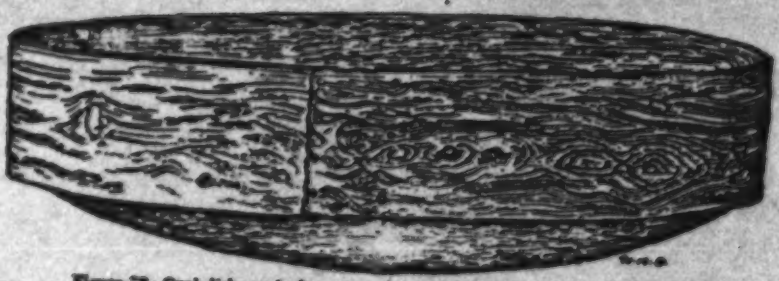

Figure 72. Oval dish, made from two pieces of wood. IV.D.825. Approx. 1/4.

Figure 73. Dish hollowed from one piece of wood. IV.D.826. 1/4.

### WATER BUCKETS

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281 The bucket for carrying water (Figure 74) was made from tanned sealskin, and fitted with a strap handle of the same material. Its usual capacity was slightly over a gallon. The vessel lasted much longer than might have been expected, because holes and small rents could be quickly patched without impairing its tightness. As with our canvas buckets, ice that formed on the inside was broken loose by hammering on the outside with a stick.

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[237
[484
[191 When travelling in winter, a few Eskimos carried on the back, under the clothing, a cylindrical water bottle (Figure 75) made from the gullet of a seal. The stopper was a wooden plug lashed inside the mouth of the bottle. Similar "thermos" bottles were known in the eastern Arctic also.

Figure 74. Water bucket, of sealskin. IV.D.810. 1/4.

### MEAT FORKS

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321 Meat forks, used for testing and removing the meat from the pot, but not for eating, were made of bone or musk-ox horn, more rarely of antler. Most were slender, tapering pencils, slightly curved, ranging in length from about 7

SNOW SHOVEL

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Owing to the difficulty of procuring wood large enough for its manufacture, 329
the snow shovel, which measured on the average 3 feet long by 18 inches wide, 422
ranked with the table among the most precious possessions of the household. Often a native, unable to obtain one plank of proper width, resorted to splicing, 284
and lashed two boards, one broad and one narrow, side by side. The cracks 356
that developed in nearly all shovels were kept from spreading by similar cross-lashings of rawhide, until the average tool had as many as six or eight "splices"

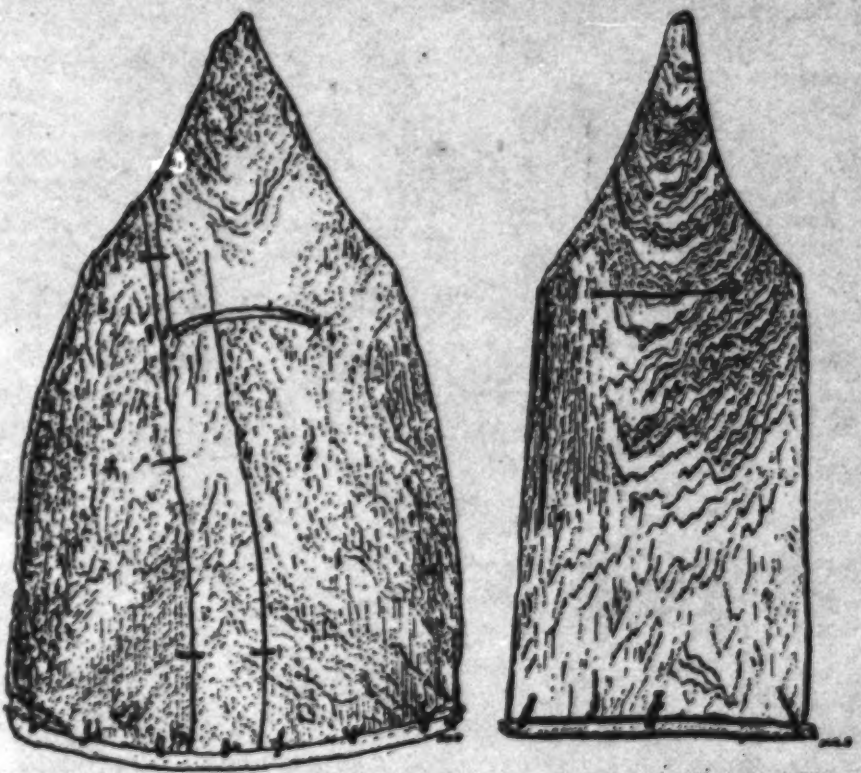

Figure 78. Snow shovels. IV.D.703, 1088. Approx. 1/8.

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on its surface. At the bottom was an edging of bone (rarely ivory), securely 284
lashed to the wood through a number of holes; and about the middle of the face was the handle, a half-hoop of antler pushed through two holes and pegged, or, more rarely, a strap of rawhide. Because this handle was liable to break through the wood, some natives strengthened the holes with bone gaskets. The general shape is illustrated in Figure 78.

SNOW DUSTER

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The snow duster, used for beating the snow from the clothes immediately before or after entering the snow-hut (and also for driving out the dogs), was merely a stick 2 feet or less in length, slightly curved, and carefully smoothed so that it would not tear the clothes, but not ornamented in any way. A typical specimen is shown in Figure 80.

Figure 80. Snow duster. IV.D.1616. Approx. 1/3.

BAGS FOR CLOTHING

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The Eskimo kept their spare clothing in round or oval bags made of sealskin or caribou hide (Figure 81a). Caribou leg skins with the fur retained were preferred for the sides, and dressed sealskin for the bottom; but housewives used any material that lay to hand. Some of the round bags, which averaged about

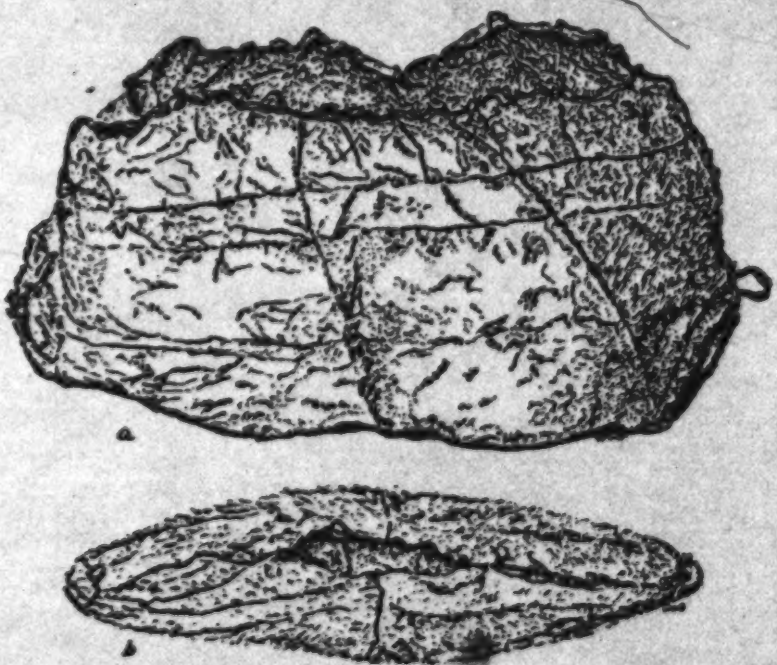

Figure 81. Bags for clothing. a: IV.D.98; b: IV.D.921. Approx. 1/8.

3 feet in diameter, laced across the top; others were tied with strips of skin extending from opposite sides, and fitted with strap handles of skin or plaited sinew to facilitate handling. The oval bag (Figure 81b) somewhat resembled

The method of using the whittling knife in Coronation Gulf and westward differed from the Greenland method described by Porsild.[1] The Copper Eskimo held the knife low down with the hand directed inward, and the handle resting along the inner side of the forearm so that it fitted into the curve of the elbow. With the instrument thus pivoted on the elbow the forearm moved as one unit and the wrist remained perfectly still. Smaller whittling knives, even though their handles did not reach the elbow, were held in the same manner.

*Grooving Tool.* The Copper Eskimo had a tool for cutting grooves in bone, antler, and horn similar in shape to the tool used by other Eskimo tribes. The blade, which was nicked at the end or else bore a sharp, pointed projection, was mounted in an antler handle of no particular shape. Sometimes the handle was split for the insertion of the blade, sometimes the blade was simply driven in with a stone, and riveted or not according to the owner's fancy. Figure 115 shows three specimens of the tool, all from Coronation Gulf; but Figure 115c is really a combination tool, because its handle served also as an arrow straightener. All three specimens have iron blades, as indeed did every grooving tool I saw in the country. Whether copper or stone preceded iron in this case I did not discover.

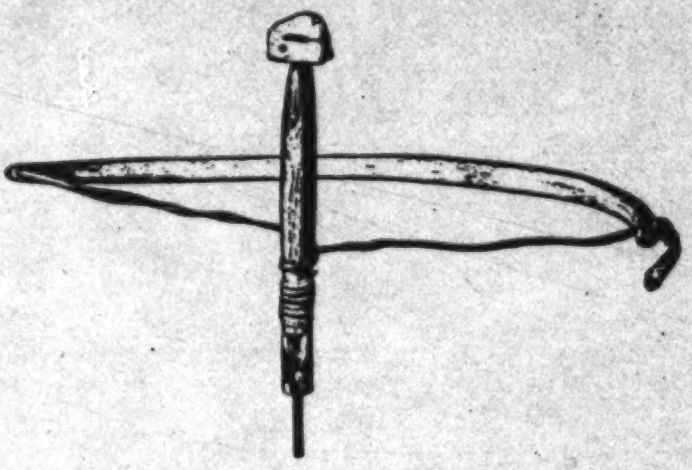

Figure 116. Drilling set. IV.D.708. 1/3.

*Drilling Sets.* The Copper Eskimo used the three-piece drilling set found among other Eskimo tribes (Figure 116). The bow was of bone, generally the rib of a musk-ox or caribou; a hole was drilled in each end for the attachment of the sealskin cord. The stem or spindle was nearly always of wood, though bone was used occasionally and ivory when it was procurable. To prevent the wood from splitting, a bead of bone, antler, or musk-ox horn was added to it, either as a cap or by splicing. All the drills I saw had points of iron, which had long been current in very small quantities; copper perhaps was used earlier, and stone, although the natives seemed to have no recollection of the stone drill points.

[1] Porsild, M. P.: Studies on the Material Culture of the Eskimo in West Greenland. Meddelelser om Grønland, vol. LI, p. 188.

412 321 325 [324] The most common mouthpiece was the astragalus of the caribou, though any piece of bone or antler, and even soapstone (Figure 117), might be shaped to serve the same purpose. When a man lacked a mouthpiece he often used the handle of his whittling knife or some other implement. The astragalus has a natural cavity of convenient size, but the rim is low on one side and the end of the spindle liable to slip out; consequently, a bone or metal peg was often inserted to raise the level of the rim in this place (Figure 118). Sometimes a small plate of copper or iron was driven into the bottom of the cavity through one side to give a hard, smooth base for the rotating spindle. The latter feature may be of modern origin, but I am inclined to favour its antiquity on account of the number of specimens in which it is found, and the analogous stone sockets in other regions.

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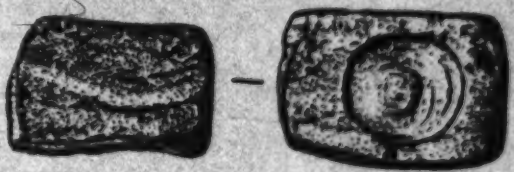

Figure 117. Mouthpiece for drill, of soapstone. IV.D.1678. 3/2.

412 321

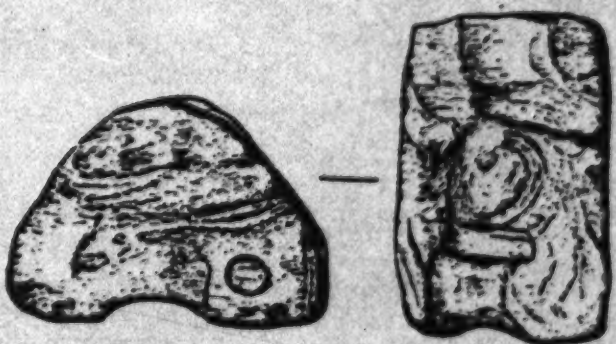

Figure 118. Mouthpiece for drill, made from caribou astragalus. IV.D.296. 3/2.

412 325 322 *Adzes.* Hearne gives the following description of Copper Eskimo adzes. "Their hatchets are made of a thick lump of copper, about five or six inches long, and from one and a half to two inches square; they are bevelled away at one end like a mortice-chisel. This is lashed into the end of a piece of wood about twelve or fourteen inches long, in such a manner as to act like an adze: in general, they are applied to the wood like a chisel, and driven in with a heavy club, instead of a mallet. Neither the weight of the tool nor the sharpness of the metal will admit of their being handled either as adze or axe, with any degree of success".[1]

[114] [1] Hearne's Journey from Prince of Wales's Fort in Hudson's Bay to the Northern Ocean, edited by J. B. Tyrrell. The Champlain Society, Toronto, 1911, p. 101. Hearne, it should be noted, did not see these "adzes" in use. I suspect, indeed, that they were not adzes, but ice chisels.

hardly distinguishable from the antler knife used by the women for chopping snow; but a curving prong in which the point formed nearly an acute angle with the handle made a more efficient tool (Figure 122). 412 321

Figure 122. Curved pick of antler. IV.D.1624. 1/4.

Mattocks were seldom required except for two purposes, to secure, in the autumn, mud for plastering the runners of the sleds, and to make shallow pits where the hunter could await unseen the approaching caribou. Some families had no mattocks, but no hunter's equipment was quite complete unless he carried a short straight one in his bow-case. In fact, the usual name for a mattock was *tallulit*, i.e., a tool for making a *tallu* or hunting pit. 412 224 [493]

*Snow Sounder.* The main purpose of the snow sounder was to test the depth and compactness of snow with a view to the construction of a snow-hut. Hunters used it occasionally to probe the breathing holes of seals. 412 [342]

The implement was a straight, slender rod of antler[1] roughly 3 feet long, usually shod at the bottom with a peg of bone or musk-ox horn. The handle, of bone or musk-ox horn also, nearly always took the form of a round button drilled to fit the top of the rod (Figure 123). Figure 124, however, shows a specimen with a more elaborate handle. [321]

### FISHING EQUIPMENT

Copper Eskimo methods of fishing have been described in Reports of the Canadian Arctic Expedition, 1913-18, vol. XII, pages 152-157. 226 113

*Rods, Hooks, and Lines.* There were two types of fishing rods. The first was a short stick from a foot to 18 inches long, curved at one end to form a handle, and notched at both ends to wind up the line. The Eskimo often had some difficulty in securing suitable wood for this kind of rod, wood that would bend without cracking. Hence, they frequently spliced two pieces of wood together, or a stick of wood to a handle of antler; or they even made the rod entirely of antler. With dry wood, too, the notches were very liable to break, 227 322

[1] Stefansson obtained a very unusual rod of solid copper (Anthrop. Papers, Am. Mus. Nat. Hist., vol. XIV, fig. 4, p. 20 (New York, 1919). [113]

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especially the lower arm of the front notch, which carried the weight of the line; consequently, this notch was often built up by splicing a short projecting piece of wood to the under side of the rod. Sometimes a bone pin was inserted about the middle of the rod, on its upper surface, for shortening the line a little; for in shallow lakes the line was lowered until it touched the bottom, then raised a few inches with a turn around this pin, and fastened with a half hitch to the lower arm of the front notch.

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The second type of fishing rod was simply a straight stick also notched at each end. Usually it was a little longer than the curved variety and was especially favoured for cod fishing, though no great distinction was made between the two kinds.

Both types of rod, with all their attachments, are shown in Figures 125 and 126.

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Capt J. Bernard discovered an ancient rod of antler (Figure 127) in an old stone house on Bell Island, off the southwest coast of Victoria Island. It closely resembles Copper Eskimo specimens, though the house itself must date from the earlier Thule culture. I do not know the purpose of the holes drilled in each end.

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The common line for these rods was a stout 3-ply cord, plaited from caribou leg sinew. It varied greatly in length, but generally ran from 35 to 60 feet. The upper end was fastened in different ways, sometimes with a few half hitches around the front of the rod, sometimes by a knot at the back end; the lower end was attached to the sinker, not to the hook, because the sinker and hook were riveted together.

[284]

[237]

For tomcod fishing in winter the western Copper Eskimo preferred a line of baleen to a sinew line, because the latter became encrusted with ice and was easily broken. These baleen lines, which could be quite short, were naturally commonest around Dolphin and Union Strait; natives farther east, who seldom or never saw a stranded whale, obtained them only by trade.

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The sinkers were of bone, antler, or musk-ox horn, most often the first two. There were two types, one for use with a comparatively small hook when fishing in the lakes for trout and salmon, the other for use with a very much longer hook for catching cod.

[284]

The former type of sinker was usually from 1 to 2 inches long, oval in outline, flat on one face and rounded on the other. Most of them had two holes drilled through the upper end, one below the other. The end of the line then passed twice through both holes, forming a double-stranded noose, and was plaited back an inch or two from the sinker, where it was bound occasionally

[112] 321

Figure 123. Snow scraper. IV.D.1084. 1/4.

Figure 124. Snow scraper with unusual handle of musk-ox horn. IV.D.116. 1/4.

412 antler, trimmed in front like a collar, and whittled down at an angle behind to
321 fit a long wooden handle. In this specimen the handle was attached by two bone pegs (which are still in position), supplemented by a sealskin lashing. In other specimens, especially the smaller ones, there was only one peg, and occasionally none at all, if the owner wished to use the same handle on his ice scoop or other implements. Apart from the number of pegs there was little or no variation in shape.

412 For several years after iron became readily available some of the Eskimo
325 still preferred their old copper ice chisels, because in shallow lakes the edge was often dulled through striking against the stones on the bottom, and copper was easier to hammer and grind into shape again than iron. The Copper Eskimo
[321] had no recollection of bone or ivory ice chisels, though their harpoon carried a pointed butt of bone or antler for planting the weapon upright in the snow.

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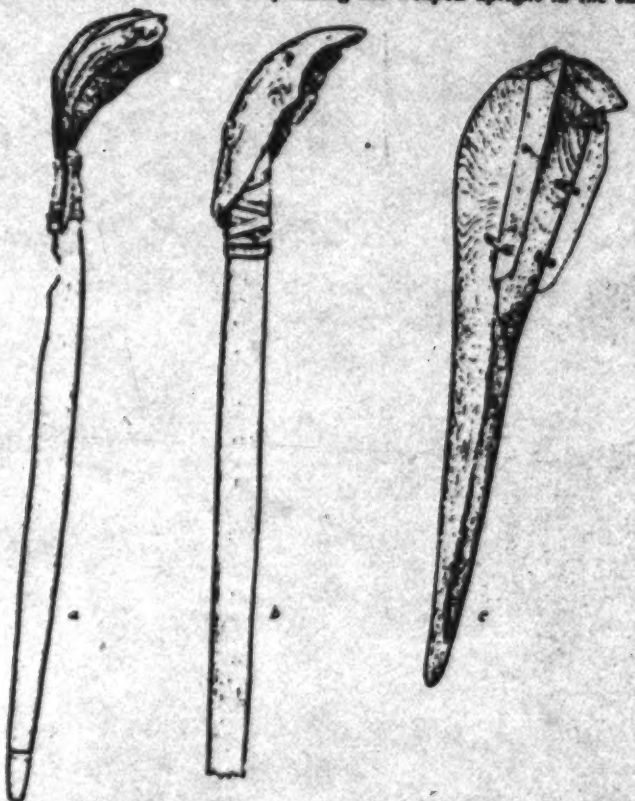

Figure 138. Ice scoops; a: of musk-ox horn; b: of bone; c: of wood edged with bone. IV.D.128, 179, 224. Approx. 2/10.

412 *Ice Scoops.* A common shape for the scoop used in clearing out the hole
321 made by the ice chisel is illustrated in Figure 138c, which shows a wooden ladle
●322 with a "free-board" of bone attached by thongs of both sinew and sealskin around the rim of the bowl. Some of the holes not filled with the lashing have
284 been plugged with wood.

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Because many natives experienced difficulty in obtaining a piece of wood large enough to carve into a bowl, they often substituted a curved piece of bone or of musk-ox horn, lashed to a wooden handle. Specimens of these more or less makeshift scoops are illustrated in Figure 138, where *a* (IV.D.135) has a bowl of musk-ox horn, and *b* (IV.D.179) of bone. The handles of such scoops could be lengthened, if necessary, by lashing to the walking-stick or fish spear, for which purpose their owners often cut notches at the ends.

### SEALING EQUIPMENT

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In the spring and autumn, when the seals were basking on the surface of the ice, Copper Eskimo hunters occasionally tried to crawl near enough to transfix them with their harpoons; but so slight were their chances of getting within range—unless perhaps in rough ice where there were sheltering hummocks—that most men never attempted the feat until they obtained rifles, which extended the effective distance for attack from 8 or 10 yards to 100 yards. Every man, on the other hand, and even some of the younger women, regularly tracked down the seals' breathing holes in the ice during the winter months and harpooned the animals when they rose to the surface. In midwinter, when the days were short, they started out for their hunting grounds half an hour before dawn, and did not return home until after dark. Their outfit was fairly standardized, though not always complete. Each man wore a long outer coat of thick caribou fur to protect his body from the cold. Sewn to the back of this coat was a bone button (*See* Figure 37) for the attachment of various tools, viz., a scoop to clear away the snow, bone skewers for closing the wounds in the seals, a toggle to drag them home, a spare harpoon head, and sometimes a foot-pad to protect the hunter's feet as he waited motionless, 1, 2, or even 3 hours, over the breathing hole. In his hand he carried his harpoon, the usual long, two-edged knife, and an "indicator" to warn him when a seal was rising to breathe; and from one wrist hung a special toggle that he attached to the trace of his dog. His method of hunting is described in "Life of the Copper Eskimos", Reports of the Canadian Arctic Expedition, vol. XII, pt. A, pages 112-114; here we need consider only the details of his tools and weapons.

*Harpoons.* The harpoon was roughly the height of a man, or from 5 feet 6 inches to 6 feet long; and it varied only in minor details (Figure 139). It contained essentially four parts—a shaft, usually of wood, but occasionally of two or more pieces of antler riveted and lashed together; a bone or antler (very rarely, copper) foreshaft that fitted into a hollow bone cap at the end of the shaft; a detachable head with a long hand line of plaited sinew;

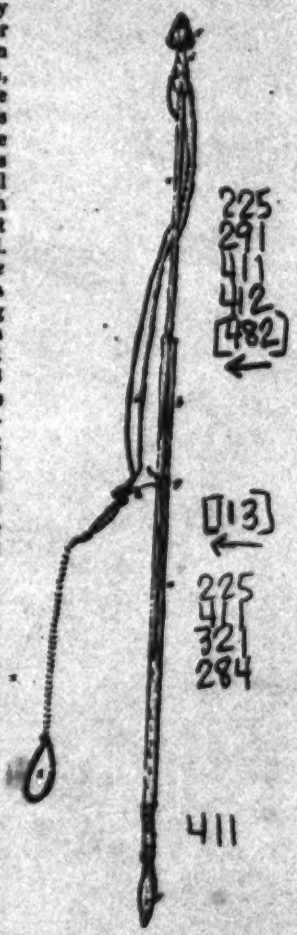


Figure 139. Sealing harpoon. *a*: wooden shaft; *b*: bone socket-piece riveted to the shaft with copper nails; *c*: antler foreshaft; *d*: antler head; *e*: copper blade; *f*: antler butt; *g, h*: sinew from hand line tucked under the thong that runs along the shaft, the thong itself being held down at this point with a copper staple; *i*: hand line of braided sinew; *k*: grip of hand line. IV.D.204. 1/10.

All sealers carried these bone skewers stuck in a strip of skin, but not all of them burdened themselves with a bag and a spare harpoon. Lacking the bag, they merely cut a hole in the strip of skin for slipping it over the coat button.

*Toggle for Leading Dog.* Figure 149 illustrates the usual toggle for leading a dog to the sealing ground. In principle it is the same as the toggle on the harness. The rigid parts are of bone, antler, or musk-ox horn; the cord and strap, of sealskin or caribou leg sinew. The broad loop hung over the sealer's wrist, and the small toggle buttoned into the loop at the end of the dog trace. There was no variation except in size, and no ornamentation.

*Toggles for Hauling Seals.* Toggles for hauling seals were indistinguishable from women's belt toggles (*See* page 50). Like most of the latter they were made of bone, antler, or musk-ox horn, nearly always the first, measured between 2½ and 4 inches from tip to tip, and had the shape of a crescent that tapered towards each end. Two ends of a short cord of sealskin, or more usually of plaited sinew, were passed through the hole and knotted to form a loop (Figure 150). The sealer threaded the toggle through a hole in the seal's mouth, passed it back through the loop and attached it to the trace of his dog, which then dragged the carcass home.

Sealing toggles, like other bone implements, were often ornamented with incised lines. These will be discussed in another place.

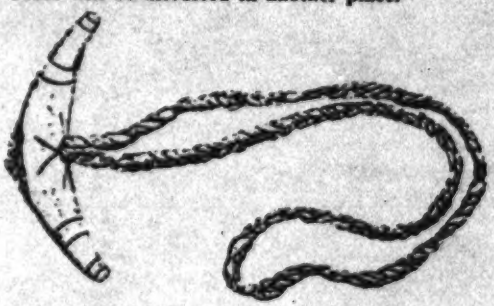

Figure 150. Toggle for hauling seals. IV.D.197. 1/2.

## LAND HUNTING EQUIPMENT

### *Bows and Arrows*

Most bows were made from three pieces of spruce wood, a middle piece and two "horns," joined together with the usual "cleft" or V splice (Figure 151*b*). Bows made from a single piece of wood were comparatively rare (Figure 151*a*), though one, owned by a 6-foot Tree River native, was stronger than any of the three-piece weapons. From the eastern end of Coronation Gulf came a few bows built up from musk-ox horn, caribou antler, or both materials combined (Figure 152), indicating a dearth of suitable wood in that region. In one of them, two pieces of musk-ox horn have been joined wth a cleft splice, but elsewhere in this bow, and in all other bows of horn or antler, the makers have used the less difficult scarfed splice, and strengthened it in places with copper or iron rivets. A few wooden bows have scarfed joints also, but they are mostly small weapons for women and children.

Because dry spruce has little tensility and easily fractures, every bow was strengthened with a score or more strands of braided sinew[1] that extended along the whole back and passed around the nocks (Figure 151). Some hunters

[1] One bow, a small one for a woman or child, has thongs of rawhide, presumably from want of sinew.

combined them into two or three cables, or wound a sinew or rawhide cord around them to keep them from slipping over the edge. Strips of sealskin beneath them checked fraying, and lashings of sinew or of rawhide at the grip and joints held them firmly against the wood. Over each of the two weak places

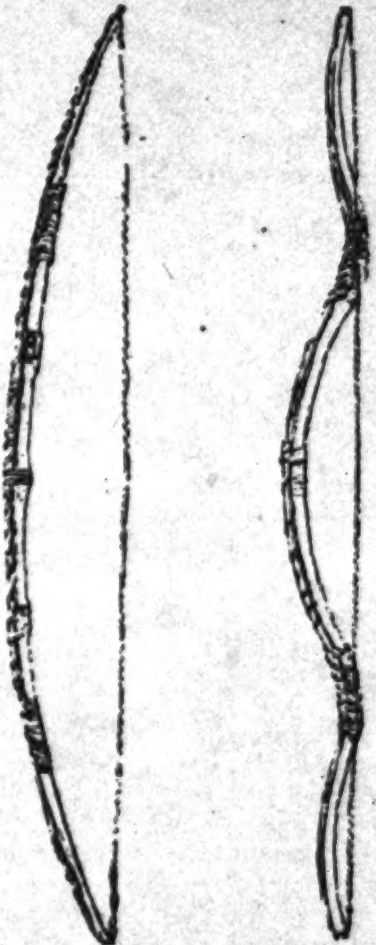

*Figure 151.* Two bows, one made from a single piece of wood, the other from three pieces. IV.D.72, 1378. 1/8.

*Figure 152.* Bow made from musk-ox horn and antler. IV.D.1789. Approx. 1/8.

in the bow, the joints, most hunters lashed a plate of wood, bone, or antler, and some added another plate on the under side (Figure 153). As many bows were of inferior wood that required strengthening in various places, the lashings and splices on one weapon seldom corresponded exactly with those on any other. The main strength of all of them, however, lay in the back lashings, which were

stick 4 inches or so in length turned up at the ends in contrary directions, and with a small hole in the middle to lash them together. No ornamentation was observed on any of these implements. 412 321

*Wedges.* Figure 184 shows a typical wedge, a flat square of wood, bone, or rawhide for inserting under the back lashings of the bow. Some had holes through the middle so that they could be tied to the bow-case. 442 237 [284] 412 [322] [321]

Figure 165. Wooden board for trimming arrow feathers. IV. D.163. 2/3.

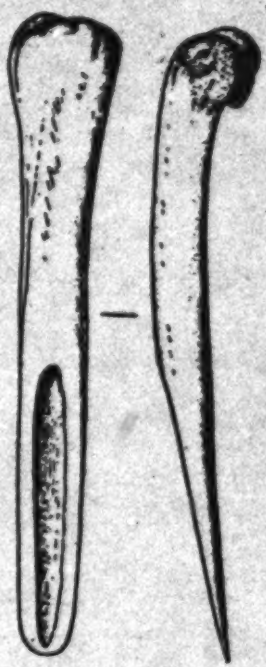

Figure 166. Bone instrument for feathering arrows. IV.D.1622. 1/1.

*Board for Trimming Feathers* (Figure 165). Any flat piece of wood served for trimming the feathers. The board in the tool bag was usually from 4 inches to 5 inches long and from 1 inch to 2 inches wide. [322]

*Grooving Tool.* The grooving tool for attaching the feathers to the end of the arrow shaft was generally the hollow wing bone of a large bird bevelled off at one end like a chisel (Figure 166). Hunters who lacked a proper grooving tool sometimes used the marline-spike. [321]

*Spare Parts of Arrows.* These consisted of broken shafts and heads that could be used in mending; scraps of bone or antler, and pieces of copper, to be worked up later into arrow heads. 411

*Bone Skewers.* The Copper Eskimo hunter had two sets of bone skewers, one for pinning up the carcass of the caribou, the other for closing the harpoon wounds in seals. It was only the former, which were usually a trifle longer and of slightly different shape, that he carried in the tool bag on his bow-case. Most of them were fashioned from caribou leg bone, and resembled rounded pencils 412 414 321

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*Needle-case* (*See* page 90). Rarely, as in Figure 157, this was attached to the bow-case.

*Mattocks* (*See* page 104).

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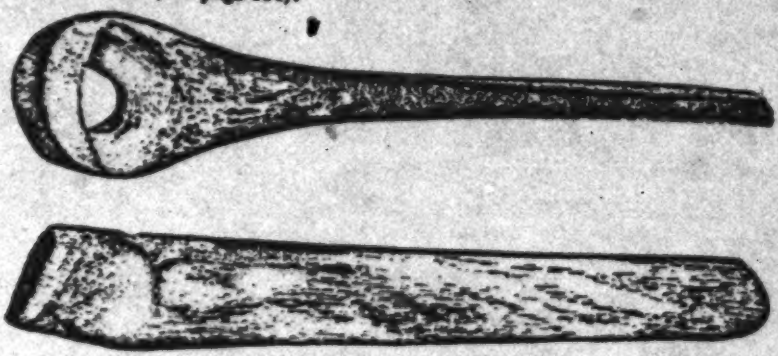

Figure 172. Arrow straightener. IV.D.216. Approx. 2/3.

*Arrow Straightener and Bow Adjuster.* Arrow straighteners are shown in Figures 172 and 173. Invariably they were made from bone or antler, and the hole through which the arrow shaft passed was bevelled at front and back. There was considerable variation in the shape of this hole; in some specimens it was almost circular, in others triangular; but the lozenge form so characteristic of North Alaskan arrow straighteners seemed conspicuously absent. The specimen shown in Figure 173 is remarkable because its owner, by making the hole rectangular and slightly hollowing the front two corners, adapted his tool for straightening two shafts at the same time. In another specimen the hole is highly polished, suggesting that the implement may have served also for smoothing rawhide thongs. However, I never saw an arrow straightener employed for that purpose, although the Copper Eskimo, unlike their kinsmen in Hudson Bay, did not possess a special tool for smoothing thongs.

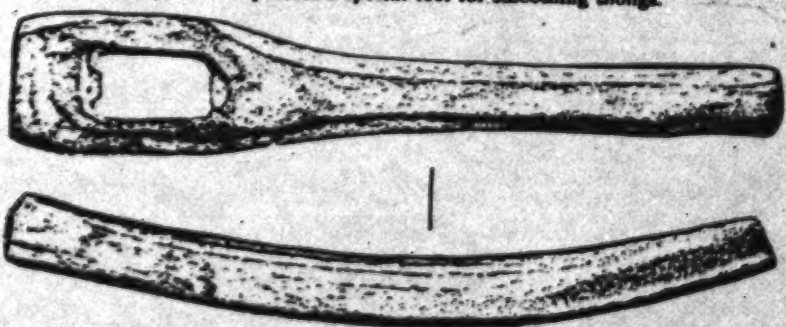

Figure 173. Arrow straightener, of antler. IV.D.138. Approx. 2/3.

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The bow adjuster (Figure 174) resembled the arrow straightener, but was necessarily much larger and for that reason made of wood. The slot was always rectangular, and it was bevelled on opposite sides, and on both faces, to produce

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two sharp edges, one of which was slightly higher than the other. One specimen 322
had two slots, the lower more worn than the upper; probably the upper slot had proved unsatisfactory and the wood was large enough to permit a second. I have seen the Eskimo use this tool to adjust the horns of the bow, but it may conceivably have served also to regulate the curvature of the centre piece.

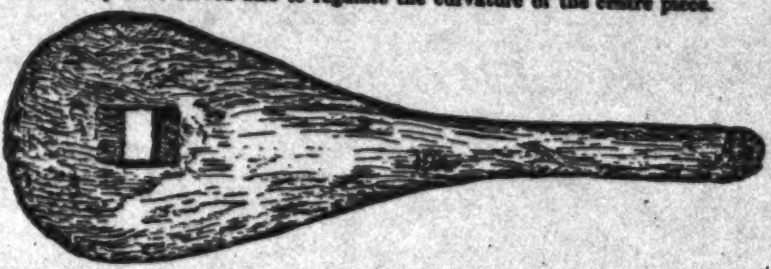

Figure 174. Bow adjuster, of wood. IV.D.84. Approx. 1/2.

*Lances*

Lances, which were used only for spearing caribou from the kayak, closely 411
resembled one type of arrow. The long tang of the triangular copper blade was [224]
driven into a head of bone, or more usually antler, which was split at the base to form a socket for the end of the wooden shaft, and secured by copper rivets. A specimen is shown in Figure 175.

Figure 175. Lance head with copper blade. IV.D.1635. 1/4.

Besides the regular caribou lance, the natives often improvised crude lances [224]
for spearing marmots in their holes, and threw them away when the occasion passed. Figure 176 illustrates the head of one of these marmot lances made of [192]
antler; in use it was lashed to a walking-stick. The natives called it indifferently a "hook" (*nigsik*), or a "lance" (*kapu.n*).

Figure 176. Crude bone point for spearing marmots. IV.D.578. 1/1.

The Copper Eskimo encountered bears so seldom that they did not develop 411
any special weapon against them. Because they dreaded to meet the barren- 224
ground grizzly at close quarters, they shot it with their bows and arrows; but 136
against the polar bear they improvised lances by lashing their two-edged snow knives to long poles.

*Sling and Bolas*

Though children occasionally flung stones at birds with their tump-lines, 411
the Copper Eskimo, strictly speaking, used neither the sling nor the bolas. They claimed, however, that both weapons were current among the inland Eskimo far to the southeast.

501 in most districts he used it so seldom that he either disposed of it after a year or two, or else broke up its frame and employed its wood and skin for other [422] purposes. At the time of our visit not one man in ten owned a kayak, or even the frame of one. Around Dolphin and Union Strait I saw only two kayaks, one of them owned by a Victoria Island native, but they became progressively more numerous as one travelled east to Bathurst Inlet. They kept the same shape everywhere, although they differed in length; and the frame was invariably 501 of spruce wood, the covering of sealskin. Generally they were longer, and, in 171 proportion to their length, narrower than kayaks to the westward. They lacked, also, attachments for a sealing harpoon or bird spear, and their bows and sterns had neither eyelets nor projecting horns to facilitate their transport on sleds. In Mackenzie Delta nearly every kayak bore an upstanding horn at each end, and along the Arctic coast of Alaska as far as Barrow, if not beyond, it was usual to have an eyelet in the bow and a horizontally projecting horn in the stern. Below are the measurements of five kayaks, two from Arctic Alaska, two from Mackenzie Delta, and one from Victoria Island within the territory of the Copper Eskimo.

| — | Arctic Alaska | | Mackenzie Delta | | Victoria Island |
|---|---|---|---|---|---|
| | Ft. In. | Ft. In. | Ft. In. | Ft. In. | Ft. In. |
| Total length | 15 | 13 3 | 15 8 | 15 10 | 21 7 |
| Greatest breadth | 1 6 | 1 6 | 1 7½ | 1 6 | 1 3½ |
| Distance of opening from stern | 6 5 | 5 8 | 7 | 7 | 8 6 |
| Depth of opening in front | 1 | 1 | 11 | 1 2 | 1 2½ |
| Depth of opening behind | 9½ | 9 | 6½ | 8 | 7 |
| Diameter of opening | 1 4 by | 1 11 by | 1 4½ by | 1 6 by | 1 6 |
| | 1 6½ | 1 3½ | 1 6 | 1 6 | |

501 In Copper Eskimo kayaks, bows and sterns were practically straight and the deck level, except just forward of the opening for the paddler, where the front of the gunwale, as usual, was raised by an angular arch. This gunwale was formed by two circular hoops of wood that bound the skin covering between them and were tightly lashed together with sealskin thongs through holes near their rims. Lashed to the deck a few inches in front of the hole was the paddle [321] rest (Figure 181), an L-shaped piece of bone with the upstanding "horn" tilted slightly backward; by resting the middle of his double-bladed paddle against this horn, the hunter obtained greater leverage. I saw no other attachment to a kayak, and was told that the hunter who carried a lance merely pushed its [126] butt under the lashings of the paddle rest. From Capt. J. Bernard, however, I [237] obtained the curious baleen object illustrated in Figure 182, which he stated had been used in some way on a Coronation Gulf kayak. Possibly it supported the skin deck, its two triangles fitting on the gunwales; or it may have been fastened on the deck and lances thrust through the triangles.

501 Figure 180 shows the wooden paddle of the kayak illustrated in the same 321 drawing. It is 11 feet long, ridged at each grip, and edged with bone on the two blades. The bone is grooved to fit over the wood and secured with antler rivets 322 that in three places have fallen out and have been replaced by iron nails. Over each of the two ridges is a sealskin ring three-quarters of an inch in diameter, made by coiling a thong of sealskin around a base of the same material; it kept 501 the water from dripping down the blade onto the paddler's hand. Having seen in the Coronation Gulf area only two other paddles, which I did not examine

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Figure 184. Bull-roarer. IV.D.462. Approx. 1/2.

Any wood that could be bent into a hoop served for the frame; actually the choice was limited to spruce and poplar, the preference being for poplar. Dehaired caribou skin formed the membrane; it was kept taut by a cord that ran in a groove around the rim. The handle was a piece of wood notched to fit the edge of the rim and secured by lashing; in no case that I observed was it riveted to the rim or embellished with any carving. The fore end of the drumstick, which was struck on the rim, was

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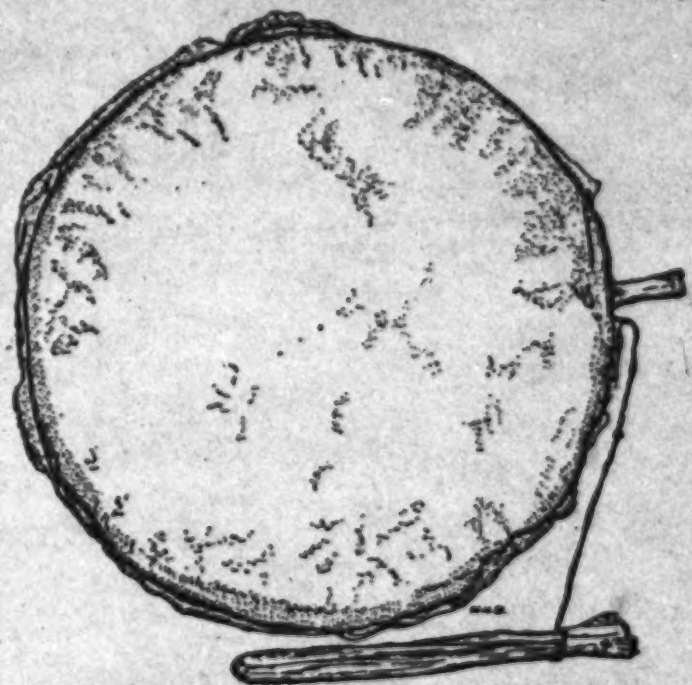

Figure 185. Drum and drumstick. IV.D.1044. 1/6.

usually covered with seal or caribou skin. The drum illustrated in Figure 185 has a maximum diameter of 18 inches. Detailed measurements of another drum are given in Report of the Canadian Arctic Expedition, vol. XII, page 222.

29: Jenness E-5 (1914-1916) 1959
ND8 Copper Eskimo ND8



224 123 bones. More embarrassing still, Icehouse insisted on frying me the liver in back fat, as I had often done for myself; only instead of pounding the fat between two stones before she placed it in the pan, she made quite sure that it would melt by chewing it!

484 313 During our march south, Ikpuck and The Runner visited the coast to search for driftwood, returning with a fine plank that had probably washed overboard from some vessel. So unusual a prize led to consider- 322 411 able discussion. At first they proposed to convert it into two sled-runners, since it required less shaping than the rude logs they generally trimmed down for that purpose; but as both their sleds were in good condition they finally decided to make fish-spears, and Ikpuck split the plank carefully from end to end by means of small wedges of antler driven home with a heavy stone. He then split each section, obtaining four stout poles which he planed and smoothed with his hunting-knife. The care he expended on the task, and his manifest joy at its successful completion, made me realize the handicap under which these people laboured through the scarcity of wood in their country. If I may compare his fish-spears with a product of our own civilization, each pole had the value of a first-class magazine rifle.

361 888 888 All was well in our old camp at Bad Creek, where The Listener's wife had stayed to dry our meat; if anxiety or loneliness had troubled her during her nine days'

29: Jenness E-5 (1914-1916) 1959
ND8 Copper Eskimo ND8



pleasure jaunt at this season, and I could search the coast-line for the ruins of ancient habitations.

The journey, outward and return, lasted three weeks, for we travelled leisurely, enjoying to the full the clear atmosphere and bright, warm sunshine that had succeeded the winter blizzards and cold. Patches of bare ground here and there relieved the monotony of the white snow, the chirping of spring birds filled the air, and numerous seals basked on the surface of the ice outside their breathing-holes. We saw several tent-rings near the shore, and an arrow and other objects lying beside two human skulls, grim relics of a forgotten tragedy. But what intrigued us most was the discovery of three stumps, rotted almost to ground level, that indicated quite clearly the site of an exceedingly ancient house.

All the Eskimo tribes in the western Arctic, where the coast-line is littered with large spruce and cottonwood trees brought down by the Mackenzie and Yukon Rivers, dwell in houses built of wood. But driftwood is so scarce in the Coronation Gulf area that the natives often made long journeys overland to distant forests in the interior in order to obtain even the small amount of timber required for sleds and narrow tables. Their only fixed dwellings were the huts of snow with which we had become so familiar; houses built wholly or partly of wood were entirely outside their knowledge. Even their traditions failed to record such houses,

29: Jenness E-5 (1914-1916) 1959
ND8 Copper Eskimo ND8



although they mentioned huts of stone, still standing in certain places, that a race of dwarfs had built in earlier days. Could it be that the natives had simply forgotten the customs of their forefathers, or was this wooden house in their country a relic of some ancient tribe that had either moved westward or become extinct?

Many small differences between the Eskimos here and their kinsmen in the Mackenzie River delta spoke in favour of the second theory. The Coronation Gulf people possessed no large open boats such as the western natives used for travelling along the coast, and they never employed the one-man canoes or kayaks for hunting seals. Their tools and weapons were much less varied, their clothing of different pattern, and their skill in carving greatly inferior. Altogether their culture seemed less developed than that of the western Eskimos, although the people themselves were not inferior in intelligence.

A year later Girling excavated a wooden house close to the ruin we had discovered on this journey. The objects he recovered from its floor, after removing the surface soil, were entirely strange to the local Eskimos, although familiar to some Alaskan natives, who had unearthed many similar specimens in their own country. Since then one discovery has succeeded another, so that today we know that the people among whom I wandered for two years had themselves moved into